

STIC Database Tracking Number: 111403

TO: Gautam Patel Location: PK2 3Y13

Art Unit: 2655

Monday, January 05, 2004

Case Serial Number: 09/944098

From: Pamela Reynolds

Location: EIC 2600

PK2-3C03

Phone: 306-0255

Pamela.Reynolds@uspto.gov

Search Notes

Dear Gautam Patel,

Please find attached the search results for 09/944098. I used the search strategy we discussed. I searched the standard Dialog files.

If you would like a re-focus please let me know.

Thank you.

Pamela Reynolds



| L Number | Hits | Search Text | DB | Time stamp |
|----------|-------|--|--------------------------------|------------------|
| 1 | 7722 | focus near6 error | USPAT; | 2004/01/05 11:27 |
| 2 | 949 | (focus near6 error) same (four quadrant quadrisect\$3) | EPO; JPO USPAT; | 2004/01/05 12:15 |
| 3 | · 117 | ((focus near6 error) same (four quadrant quadrisect\$3)) same (perpendicular radial) | EPO; JPO USPAT; EPO: JPO | 2004/01/05 11:29 |
| 4 | 62 | | USPAT; EPO: JPO | 2004/01/05 11:33 |
| 5 | 10 | ((((focus near6 error) same (four quadrant quadrisect\$3)) same (perpendicular radial)) same (track tangent\$4)) same | USPAT; EPO; JPO | 2004/01/05 11:49 |
| 6 | 173 | cylindric\$4 ((focus near6 error) same (four quadrant quadrisect\$3)) same cylindric\$4 | USPAT; EPO: JPO | 2004/01/05 11:49 |
| 7 | 163 | (((focus near6 error) same (four quadrant quadrisect\$3)) same cylindric\$4) not (((((focus near6 error) same (four quadrant quadrisect\$3)) same (perpendicular radial)) same (track tangent\$4)) same cylindric\$4) | USPAT; EPO; JPO | 2004/01/05 11:49 |
| 8 | 45329 | cylindric\$4 same (four quadrant quadrisect\$3) | USPAT; EPO: JPO | 2004/01/05 12:16 |
| 9 | 173 | (cylindric\$4 same (four quadrant quadrisect\$3)) same (focus near6 error) | USPAT; EPO: JPO | 2004/01/05 12:16 |
| 10 | 6 | ((cylindric\$4 same (four quadrant quadrisect\$3)) same (focus near6 error)) same ((lenses plural\$4 multipl\$4 second) near4 cylindric\$4) | USPAT; EPO; JPO | 2004/01/05 12:17 |

| L Number | Hits | Search Text | DB | Time stamp |
|----------|--------|---|----------|------------------|
| 1 | 127302 | optical adj2 (device element) | USPAT; | 2004/01/05 15:27 |
| | | | EPO; JPO | V |
| 2 | 283216 | (plural\$4 multipl\$4 four quad\$8) near4 (section division | USPAT; | 2004/01/05 15:29 |
| · | | quadrant) | EPO; JPO | |
| 3 | 1650 | (optical adj2 (device element)) same ((plural\$4 multipl\$4 four | USPAT; | 2004/01/05 15:29 |
| | | quad\$8) near4 (section division quadrant)) | EPO; JPO | |
| 4 · | 118 | ((optical adj2 (device element)) same ((plural\$4 multipl\$4 four | USPAT; | 2004/01/05 15:29 |
| | | quad\$8) near4 (section division quadrant))) same focus | EPO; JPO | |
| 5 | 0 | (((opinos) saje (dotino didinonty) dante ((piaratipi intitalipi intitali | USPAT; | 2004/01/05 15:29 |
| | | quad\$8) near4 (section division quadrant))) same focus) same "90" | EPO; JPO | |
| 6 | 34 | (((optical adj2 (device element)) same ((plural\$4 multipl\$4 four | USPAT: | 2004/01/05 15:30 |
| | | quad\$8) near4 (section division quadrant))) same focus) same astigmat\$4 | EPO; JPO | 2555 ./65 19.55 |

| L Number | Hits | Search Text | DB | Time stamp |
|----------|------|---|--------------------------------|------------------|
| 1 | 7722 | focus near6 error | USPAT; | 2004/01/05 11:27 |
| 2 | 949 | (focus near6 error) same (four quadrant quadrisect\$3) | EPO; JPO USPAT; EPO: JPO | 2004/01/05 11:28 |
| 3 | 117 | ((focus near6 error) same (four quadrant quadrisect\$3)) same (perpendicular radial) | USPAT; EPO: JPO | 2004/01/05 11:29 |
| 4 | 62 | " ' | USPAT; EPO: JPO | 2004/01/05 11:33 |
| 5 | 10 | ((((focus near6 error) same (four quadrant quadrisect\$3)) same (perpendicular radial)) same (track tangent\$4)) same cylindric\$4 | USPAT; EPO; JPO | 2004/01/05 11:35 |

```
2:INSPEC 1969-2003/Dec W2
File
         (c) 2003 Institution of Electrical Engineers
       6:NTIS 1964-2004/Jan W1
File
         (c) 2004 NTIS, Intl Cpyrght All Rights Res
       8:Ei Compendex(R) 1970-2004/Dec W4
File
         (c) 2004 Elsevier Eng. Info. Inc.
     34:SciSearch(R) Cited Ref Sci 1990-2003/Dec W4
File
         (c) 2003 Inst for Sci Info
     35:Dissertation Abs Online 1861-2003/Nov
File
         (c) 2003 ProQuest Info&Learning
      65:Inside Conferences 1993-2004/Jan W1
File
         (c) 2004 BLDSC all rts. reserv.
      94:JICST-EPlus 1985-2004/Dec W4
File
         (c) 2004 Japan Science and Tech Corp(JST)
      95:TEME-Technology & Management 1989-2004/Dec W3
File
         (c) 2004 FIZ TECHNIK
     99:Wilson Appl. Sci & Tech Abs 1983-2003/Nov
File
         (c) 2003 The HW Wilson Co.
File 144:Pascal 1973-2003/Dec W2
         (c) 2003 INIST/CNRS
File 239:Mathsci 1940-2003/Feb
         (c) 2003 American Mathematical Society
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
File 583: Gale Group Globalbase (TM) 1986-2002/Dec 13
         (c) 2002 The Gale Group
File 603:Newspaper Abstracts 1984-1988
         (c)2001 ProQuest Info&Learning
File 483: Newspaper Abs Daily 1986-2004/Jan 03
         (c) 2004 ProQuest Info&Learning
? ds
                Description
Set
        Items
                CYLINDRIC? AND (LENS OR LENSES)
         4928
S1
                 (FOUR OR 4 OR QUADRANT?) AND (PARTS OR SECTIONS OR SECTORS
       357918
S2
             OR PARTITIONS OR SEGMENT?)
                FOCUS
       491461
S3
                (NINETY OR 90) () DEGREES
        38774
S4
        11545
                ASTIGMATISM
S5
           49
                S1 AND S2
S6
                S6 AND S3
S7
            1
            1
                S6 AND S4
S8
                S8 NOT S7
S9
            1
                S6 AND S5
S10
            6
            5
                S10 NOT (S7 OR 8 OR S9)
$11
S12
                RD S11 (unique items)
```

7/3,K/1 (Item 1 from file: 2)

DIALOG(R) File 2: INSPEC

(c) 2003 Institution of Electrical Engineers. All rts. reserv.

6653125 INSPEC Abstract Number: A2000-17-8760B-016, B2000-09-7510H-012

Title: 2-D arrays [for diagnostic ultrasound]

Author(s): von Ramm, O.T.

Author Affiliation: Centre for Emerging Cardiovascular Technol., Duke Univ., Durham, NC, USA

Journal: Ultrasound in Medicine and Biology vol.26, suppl., no.1 p. \$10-12

Publisher: Elsevier,

Publication Date: 2000 Country of Publication: USA

CODEN: USMBA3 ISSN: 0301-5629

SICI: 0301-5629(2000)26:1L.s10:ADU;1-P Material Identity Number: F148-2000-005

U.S. Copyright Clearance Center Code: 0301-5629/2000/\$20.00

Language: English

Subfile: A B

Copyright 2000, IEE

...Abstract: the early years of diagnostic ultrasound, single element transducers predominated in pulse-echo equipment. Acoustic lenses cemented to the front of the "piston" transducers improved resolution in portions of the image...

... continuously or in appropriate small steps, to keep echoes from the transmitted pulse in constant **focus** as this pulse propagates deeper into the tissues. Dynamic focusing results in improved resolution throughout...

...of the transducer aperture (i.e., for ranges Z<Z/sub T/=L/sup 2// $\bf 4$ lambda), where L is the transducer diameter and lambda is the nominal transmitted wavelength. Calculations...

... recently, such systems employed a one-dimensional linear array of transducer elements to steer and **focus** the beam in a sectional or tomographic plane. Focusing in the out-of-plane dimension was either nonexistent or achieved via a fixed **focus** cylindrical lens. A creative approach to this focusing problem was suggested by Macovski and Norton (1975) who...

... army," which featured a central one-dimensional linear array for beam steering surrounded by a **segmented** annular array to provide focusing in all dimensions.

9/3,K/1 (Item 1 from file: 34)

DIALOG(R) File 34: SciSearch(R) Cited Ref Sci (c) 2003 Inst for Sci Info. All rts. reserv.

06221600 Genuine Article#: YC729 No. References: 40

Title: Complex fragment emission in the 200-MeV He- 4 +Ag-nat, Au-197 reactions

Author(s): Zhang J (REPRINT); Kwiatkowski K; Bonser D; Fatyga M; Coon SD; Stith K; Viola VE; Woo LW; Yennello SJ

Corporate Source: INST ATOM ENERGY,/BEIJING 102413//PEOPLES R CHINA/ (REPRINT); INDIANA UNIV,DEPT CHEM/BLOOMINGTON//IN/47405; INDIANA UNIV,DEPT PHYS/BLOOMINGTON//IN/47405; INDIANA UNIV,IUCF/BLOOMINGTON//IN/47405

Journal: PHYSICAL REVIEW C-NUCLEAR PHYSICS, 1997, V56, N4 (OCT), P1918-1925

ISSN: 0556-2813 Publication date: 19971000

Publisher: AMER INST PHYSICS, CIRCULATION FULFILLMENT DIV, 500 SUNNYSIDE BLVD, WOODBURY, NY 11797-2999

Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

Title: Complex fragment emission in the 200-MeV He- 4 +Ag-nat, Au-197 reactions

- Abstract: Spectra, angular distributions, and cross **sections** have been measured for Z=3-14 fragments produced in 200-MeV He- **4** -induced reactions on Ag-nat and Au-197 targets. In addition, isotopic yields were measured...
- ...extending from the emission barrier to momenta in excess of the incident beam. Backward of **90 degrees** the yields are nearly isotropic and exhibit spectra consistent with emission from an equilibrated composite
- ...Identifiers--MASTER EQUATION THEORY; PREEQUILIBRIUM REACTIONS; NUCLEAR FRAGMENTATION; EXCITATION-FUNCTIONS; CROSS- SECTIONS; MEV HE-3; MASS; ENERGY; MULTIFRAGMENTATION; HE-3+AG-NAT
- ...Research Fronts: NUCLEAR MULTIFRAGMENTATION; COMPLEX FRAGMENT EMISSION) 95-2602 001 (SHEARS BANDS; HEAVY-IONS IN SOLIDS; ACTIVE CYLINDRICAL PLASMA LENS CONCEPT)

```
(Item 1 from file: 2)
DIALOG(R)File
                2:INSPEC
(c) 2003 Institution of Electrical Engineers. All rts. reserv.
7466926 INSPEC Abstract Number: A2003-01-0630C-010, B2003-01-7320C-013
           Displacement measurement sensor using astigmatic confocal
   Title:
technology
  Author(s): Seo, J.W.; Kang, D.K.; Lee, J.H.; Kim, D.M.; Gweon, D.G.
  Author Affiliation: Dept. of Mech. Eng., KAIST, Daejeon, South Korea
  Conference Title: ICCAS 2002. International Conference on Control,
Automation and Systems
                       p.1572-5
  Publisher: Inst. Control, Autom. & Syst. Eng, Taejon, South Korea
  Publication Date: 2001 Country of Publication: South Korea
  Material Identity Number: XX-2001-01846
  Conference Title: Proceedings of 2001 International Conference on
Control, Automation and Systems (16th Korea Automatic Control Conference)
  Conference Sponsor: Korea Res. Found.; Korea Sci. & Eng. Found.; Korea
Nat. Tourism Organ.; Korean Federation of Sci. & Technol. Soc
  Conference Date: 17-21 Oct. 2001
                                         Conference Location: Jeju Island,
South Korea
  Language: English
  Subfile: A B
  Copyright 2002, IEE
  ... Abstract: using the optical probe in scanning probe microscopy (SPM).
Application of the confocal theory and astigmatism to a displacement measurement sensor is discussed. Object movement can be detected with
several tens...
... and object variations. This paper shows mathematical expressions of
astigmatic sensor parameters such as the lens power in the optical fields
and the geometry of the lens system. We propose methods for the
elimination of odd aberrations concerned with the finite system...
  ...Descriptors: lenses;
  ... Identifiers: astigmatic lens; ...
... four - segments detector...
... cylindrical
                  lens; ...
...positive power lens; ...
... lens system geometry
              (Item 2 from file: 2)
 12/3, K/2
DIALOG(R) File 2: INSPEC
(c) 2003 Institution of Electrical Engineers. All rts. reserv.
          INSPEC Abstract Number: A1999-03-8732Q-002
6124699
  Title: Development and validation of a visual acuity chart for Australian
Aborigines and Torres Strait Islanders
  Author(s): Wildsoet, C.F.; Wood, J.M.; Hassan, S.
  Author Affiliation: New England Coll. of Optometry, Boston, MA, USA
  Journal: Optometry and Vision Science vol.75, no.11
                                                           p.806-12
  Publisher: Williams & Wilkins for American Acad. Optometry,
  Publication Date: Nov. 1998 Country of Publication: USA
  CODEN: OVSCET ISSN: 1040-5488
  SICI: 1040-5488 (199811) 75:11L.806: DVVA; 1-3
  Material Identity Number: M887-1998-008
```

U.S. Copyright Clearance Center Code: 1040-5488/98/7511-0806\$03.00/0

Language: English

Subfile: A

Copyright 1999, IEE

...Abstract: for these 3 charts and an Illiterate E chart, with refractive blur imposed with trial lenses over habitual distance corrections (spherical: +0.50, +1.00, +2.00, and + 4.00 D; cylindrical: +1.00 and +2.00 D, axes 45, 90, and 180 degrees). To avoid cultural... ... study, subjects were selected from the wider Australian population rather than specifically from its indigenous segment. Results. Experiment I: The Turtle chart performed most like the Konig Bar chart for this...

... and the Konig Bar chart showing a slower decline in performance, with increasing defocus. All 4 charts showed similar directional biases with astigmatic defocus, being most affected by oblique (45 degrees) astigmatism . It is concluded that the Turtle chart met the criteria set for its validation as...

... Identifiers: trial lenses;

12/3,K/3 (Item 1 from file: 144) DIALOG(R)File 144:Pascal (c) 2003 INIST/CNRS. All rts. reserv.

14442887 PASCAL No.: 00-0101563

Implantation of a toric poly(methyl methacrylate) intraocular lens to correct high astigmatism

FROHN A; DICK H B; THIEL H J

Department of Ophthalmology, Eberhardt Karls-University,, Tuebingen, Germany; Department of Ophthalmology, Johannes Gutenberg-University, Mainz, Germany

Journal: Journal of cataract and refractive surgery, 1999, 25 (12)

1675-1678

Language: English

Copyright (c) 2000 INIST-CNRS. All rights reserved.

Implantation of a toric poly(methyl methacrylate) intraocular lens to correct high astigmatism

... 57-year-old man experienced a decrease in visual function because of cataract formation. Corneal astigmatism was 13. 4 diopters (D) because he had had a penetrating keratoplasty 27 years before. Cataract surgery was planned, and biometric data for toric intraocular lens (IOL) implantation the manufacture of а custom collected for phacoemulsification, a toric poly(methyl methacrylate) (PMMA) IOL of + 19.0 and +12.0 D cylindrical power was implanted via a spherical tunnel Incision. Three months postoperatively, corneal sclerocorneal astigmatism was 14.3 D and best corrected visual acuity (BCVA), 20/25. Postoperative refraction (+1...

... No significant IOL rotation was observed. Implantation of a toric PMMA IOL corrected high corneal **astigmatism**. Toric IOL technology with high **cylindrical** power allows enhancemen of IOL surgery.

English Descriptors: Cataract; Surgery; Treatment; Astigmatism;
Complication; Intraocular lens; Toric lens; Biomaterial; Methyl
methacrylate polymer; Case study; Human

Broad Descriptors: Eye disease; Lens disease; Anterior segment disease; Vision disorder; Refractive error; Oeil pathologie; Cristallin pathologie

; Segment anterieur pathologie; Trouble vision; Trouble refraction oculaire; Ojo patologia; Cristalino patologia; Segmento anterior patologia; Trastorno vision; Trastorno refraccion ocular?

```
File 344: Chinese Patents Abs Aug 1985-2003/Nov
         (c) 2003 European Patent Office
File 347: JAPIO Oct 1976-2003/Aug(Updated 031202)
         (c) 2003 JPO & JAPIO
File 350:Derwent WPIX 1963-2004/UD,UM &UP=200401
         (c) 2004 Thomson Derwent
? ds
       Items
               Description
Set
               CYLINDRIC? AND (LENS OR LENSES)
S1
       14892
                (FOUR OR 4 OR QUADRANT?) AND (PARTS OR SECTIONS OR SECTORS
S2
       647634
            OR PARTITIONS OR SEGMENT?)
       524466
              FOCUS
S3
               (NINETY OR 90) () DEGREES
        33755
S4
S5
         4386
               ASTIGMATISM
S6
          722
               S1 AND S2
          112
               S6 AND S3
S7
S8
          1
               S7 AND S4
           . 8
               S7 AND S5
S9
               S9 NOT S8
S10
            5 S10 NOT (PHOTODETECT? OR PHOTOSENSOR? OR LIGHTSENSOR? OR L-
S11
            IGHT()SENSOR?)
```

8/3,K/1 (Item 1 from file: 347)

DIALOG(R) File 347: JAPIO

(c) 2003 JPO & JAPIO. All rts. reserv.

01331046 **Image available**

RADIAL SKEW CORRECTING DEVICE OF DISK DEVICE

PUB. NO.: 59-042646 [JP 59042646 A] PUBLISHED: March 09, 1984 (19840309)

INVENTOR(s): KOIZUMI AKIO

YOSHITOSHI HIROSHI

YANO HAJIME

APPLICANT(s): SONY CORP [000218] (A Japanese Company or Corporation), JP

(Japan)

APPL. NO.: 57-151242 [JP 82151242] FILED: August 31, 1982 (19820831)

JOURNAL: Section: P, Section No. 284, Vol. 08, No. 144, Pg. 71, July

05, 1984 (19840705)

ABSTRACT

PURPOSE: To eliminate a radial skew, by matching a **focus** at two different positions in the radial direction of a disk...

... light which is made incident to a disk 2 is reflected, passes through a .lambda./ 4 plate 7 two times when going and returning, is returned to the midway, and the plane of polarization of light is rotated by 90 degrees. Accordingly, the return light is reflected by a beam splitter 5, and thereafter, is made incident to a detector 11 through a convex lens 9 and a cylindrical lens 10. Five photodetecting parts 12-16 are formed on the detector 11. The photodetecting parts 12, 15 and 16 are all constituted of photodetectors A-D. Among them, an RF...

...of all photodetecting outputs of the detectors A-D of the photodetecting part 12. A **focus** detection by outputs of the element A-D of the photodetecting part 12 is used for **focus** -servo. The **focus** detection of the photodetecting **parts** 15, 16 are used for correcting a radial skew, and the disk 2 is driven so that the **focus** is matched at two different points in the radial direction of the disk 2, by...

11/3,K/1 (Item 1 from file: 347)

DIALOG(R) File 347: JAPIO

(c) 2003 JPO & JAPIO. All rts. reserv.

06674207 **Image available**

DEVICE AND METHOD FOR DETECTING FOCUS ERROR OF OPTICAL PICKUP

PUB. NO.: 2000-260033 [JP 2000260033 A] PUBLISHED: September 22, 2000 (20000922)

INVENTOR(s): OGASAWARA MASAKAZU

OTAKI MASARU

YANAGISAWA TAKUMA

APPLICANT(s): PIONEER ELECTRONIC CORP APPL. NO.: 11-059537 [JP 9959537] FILED: March 08, 1999 (19990308)

DEVICE AND METHOD FOR DETECTING FOCUS ERROR OF OPTICAL PICKUP

ABSTRACT

PROBLEM TO BE SOLVED: To provide a device and method for detecting a **focus** error of an optical pickup, resistant to being influenced by a track traverse noise and...

...permitting to use a three-beam system and a DPD system together.

SOLUTION: In this focus error detecting method, a return light beam from an optical disk is divided into a 1st optical path P1 and a 2nd optical path P2 by a lens element 8 combining eccentric cylindrical lenses 31-34, and also an astigmatism is added to the light in each divided optical path, and a 1st detector 41 and a 2nd detector 42 having light-receiving parts divided in four by lightning-formed division lines receive and detect the light, and thus, a focus error signal is obtained by a prescribed arithmetic operation.

COPYRIGHT: (C) 2000, JPO

11/3,K/2 (Item 2 from file: 347)

DIALOG(R) File 347: JAPIO

(c) 2003 JPO & JAPIO. All rts. reserv.

02666039 **Image available**
OPTICAL PICK-UP

PUB. NO.: 63-282939 [JP 63282939 A] PUBLISHED: November 18, 1988 (19881118)

INVENTOR(s): NOMURA HIROO KENMOCHI NOBUHIKO

APPLICANT(s): SEIKO EPSON CORP [000236] (A Japanese Company or Corporation)

, JP (Japan)

APPL. NO.: 62-118259 [JP 87118259] FILED: May 15, 1987 (19870515)

JOURNAL: Section: P, Section No. 842, Vol. 13, No. 104, Pg. 41, March

13, 1989 (19890313)

ABSTRACT

... optical pick-up by using a simple constitution providing a double refraction prism, a converging lens, a cylindrical lens and a four -divided light detector...

...CONSTITUTION: A laser light flux is condensed through a collimator lens

- 2, a polarizing beam splitter 3, a mirror ${\bf 4}$ and a ${\bf lens}$ 5 on an information recording support 6. The light from the support 6 is reflected
- ...and O to come out from the prism at a different angle are focused to parts 10a and 10b having a different divided type light detector by a lens 8. The differential of the output of detectors 10a and 10b is obtained by a...

...optical magnetic signal strong to a light quantity fluctuation noise can be detected. Further, a cylindrical lens 9 is placed in the same light path, the detector 10a is made into a four -divided type, and then, a focus servo signal by an astigmatism method can be also detected in the same light path.

11/3,K/3 (Item 3 from file: 347)

DIALOG(R) File 347: JAPIO

(c) 2003 JPO & JAPIO. All rts. reserv.

01847140 **Image available**
OPTICAL SYSTEM SIGNAL REPRODUCING DEVICE

PUB. NO.: 61-061240 [JP 61061240 A] PUBLISHED: March 29, 1986 (19860329)

PUBLISHED: March 29, 1986 (INVENTOR(s): KATASE YOSHIHIRO

INOUE MASAYUKI SUGIYAMA TOSHIO OKUDA TADASHI

APPLICANT(s): HITACHI LTD [000510] (A Japanese Company or Corporation), JP

(Japan)

APPL. NO.: 59-182613 [JP 84182613]

FILED: September 03, 1984 (19840903)

JOURNAL: Section: P, Section No. 484, Vol. 10, No. 225, Pg. 122,

August 06, 1986 (19860806)

ABSTRACT

PURPOSE: To make **focus** error detection by an **astigmatism** method with simple constitution that does not use a **cylindrical lens** by placing the first transparent parallel flat plate in the light path between a collimator **lens** and a light detector and slanting it to the optical axis

focus error signal is optained by the difference of sum of detection output of detecting sections 10a, 10c of the first and third quadrants of a light detector 10 and the sum of detection output of detecting sections 10b, 10d of the second and fourth quadrants by astigmatism generated by the slanted parallel flat plate 8. A tracking error signal is obtained by a difference in detection output of light detectors 11, 12. An objective lens 6 is shifted in the direction (y) perpendicular to the direction (x) of recording tracks...

11/3,K/4 (Item 1 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

014132537 **Image available**
WPI Acc No: 2001-616748/200171

XRAM Acc No: C01-184719 XRPX Acc No: N01-460020

Contact lens for toric lenses used for astigmatism, includes ballast portion with uniform thickness in horizontal cross-sections on portions of anterior face of lens body

Patent Assignee: OCULAR SCI INC (OCUL-N)

Inventor: BACK A

Number of Countries: 096 Number of Patents: 008

Patent Family:

| racciic ramarj. | | | | | | | | | |
|-----------------|-----|-------------|------|----------|---------------|------|----------|--------|---|
| | Pat | ent No | Kind | Date | Applicat No | Kind | Date | Week | |
| | WO | 200175509 | A1 | 20011011 | WO 2001US9923 | Α | 20010328 | 200171 | В |
| | ΑU | 200147847 | A | 20011015 | AU 200147847 | Α | 20010328 | 200209 | |
| | US | 20020149742 | 2 A1 | 20021017 | US 2000193493 | Р | 20000331 | 200270 | |
| | | | | | US 2001818244 | ·A | 20010327 | | |
| | | | | | US 2002171718 | A | 20020614 | | |
| | US | 6467903 | В1 | 20021022 | US 2000193493 | P | 20000331 | 200273 | |
| | - | | | | US 2001818244 | Α | 20010327 | | |
| | EΡ | 1281099 | A1 | 20030205 | EP 2001920834 | Α | 20010328 | 200310 | |
| | | | | | WO 2001US9923 | Α | 20010328 | | |
| | BR | 200109734 | Α | 20030204 | BR 20019734 | A | 20010328 | 200318 | |
| | | | | | WO 2001US9923 | Α | 20010328 | | |
| | KR | 2002087944 | · A | 20021123 | KR 2002713002 | Α | 20020930 | 200320 | |
| | CN | 1432139 | Α | 20030723 | CN 2001810416 | Α | 20010328 | 200365 | |

Priority Applications (No Type Date): US 2001818244 A 20010327; US 2000193493 P 20000331; US 2002171718 A 20020614

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200175509 A1 E 42 G02C-007/04

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

AU 200147847 A G02C-007/04 Based on patent WO 200175509

US 20020149742 A1 G02C-007/04 Provisional application US 2000193493

Cont of application US 2001818244

US 6467903 B1 G02C-007/04 Provisional application US 2000193493 EP 1281099 A1 E G02C-007/04 Based on patent WO 200175509 Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR

BR 200109734 A G02C-007/04 Based on patent WO 200175509

KR 2002087944 A G02C-007/04

CN 1432139 A G02C-007/04

Contact lens for toric lenses used for astigmatism , includes ballast portion with uniform thickness in horizontal cross- sections on portions of anterior face of lens body

Abstract (Basic):

- ... A contact **lens** comprises a non-axi-symmetric body with a thickness between anterior and posterior faces. A...
- ...on portion(s) of the anterior face and has a series of consecutive horizontal cross- sections with uniform thickness.
- .. A contact **lens** comprises a contact **lens** body having spherical base curvature with a convex anterior face, a concave posterior face, and...

- ...edge of the anterior face that is tapered thinner toward the peripheral edge of the **lens**. The body has a thickness between the anterior and posterior faces and is non-axi...
- ...the superior, intermediate, and inferior portion(s) and has a series of consecutive horizontal cross- **sections** exclusive of the peripheral zone and optic zone spanning a distance along the vertical meridian...
- ...For toric lenses used for astigmatism .
- ...The invention imposes a low-torque rotational correction on the **lens** and has improved thickness and ballast arrangement. It reduces the known variability of **lens** orientation from individual to individual, provides more effective interaction between stabilization mechanism and the eyelid...
- ... The figure shows a schematic front elevational view of the contact lens

Technology Focus:

TECHNOLOGY FOCUS - ...

- ...the inner zone and peripheral edge is less than 1.45 (preferably less than 1.4) mm and a rate of change of thickness in the tapered peripheral zone is less...
- ...The maximum thickness along a 225degrees meridian of the **lens** is 200-400, preferably 250-350 mum...
- ...A cylindrical correction is provided on the anterior face or preferably the posterior face...
- \dots The inner zone is uniform radial width around the circumference of the lens .
- ... The body is a soft contact **lens**. The **lens** also incorporates a dynamic stabilization mechanism and a negative spherical power distance correction.
- ... Title Terms: LENS ;

11/3,K/5 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

004734788

WPI Acc No: 1986-238130/198636

XRPX Acc No: N86-177752

Colour picture tube with in-line electron gun - has tube neck coating as one electrode and cylindrical apertured electrode with focus control

Patent Assignee: RCA CORP (RADC)

Inventor: ALIG R C

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week US 4590403 A 19860520 US 84646117 A 19840831 198636 B

Priority Applications (No Type Date): US 84646117 A 19840831 Patent Details:
Patent No Kind Lan Pg Main IPC Filing Notes
US 4590403 A 6

- ... has tube neck coating as one electrode and cylindrical apertured electrode with focus control
- ...Abstract (Basic): beam and two side beams, along coplanar paths toward a screen. The gun includes prefocus lens electrodes and main focus lens electrodes. The main focus lens is formed by two spaced electrode members. One of the electrodes forming the main focus lens is an internal conductive coating on the neck. The other electrode includes three parts.
- ...A cylindrical portion is smaller in diameter than the neck and is located in overlapped relation with...
- ...apertures which are aligned with the electron beam paths. A controller is located between the **cylindrical** and apertured portions for controlling the **astigmatism** of the **focus** of the two side beams...
- ...ADVANTAGE Lowers focus lens aberration. (6pp Dwg.No. 4 / 4)
 ...Title Terms: FOCUS;

File 348:EUROPEAN PATENTS 1978-2003/Dec W02 (c) 2003 European Patent Office File 349:PCT FULLTEXT 1979-2002/UB=20031225,UT=20031218 (c) 2003 WIPO/Univentio ? ds Description Items Set 5485 CYLINDRIC? (3N) (LENS OR LENSES) S1 (FOUR OR 4 OR QUADRANT?) (3N) (PARTS OR SECTIONS OR SECTORS -S2 76414 OR PARTITIONS OR SEGMENT?) S3 59885 FOCUS 30900 (NINETY OR 90) () DEGREES S4 3459 ASTIGMATISM S5 55 S1(S)S2 S6 17 S6(S)S3 S7 S7(S)S4 S8 1 7 S7(S)S5 S9 7 S9 NOT S8 S10 3 S10 NOT (PHOTODETECT? OR PHOTOSENSOR? OR LIGHTSENSOR? OR L-S11

IGHT()SENSOR?)

```
8/3,K/1
            (Item 1 from file: 349)
DIALOG(R) File 349: PCT FULLTEXT
(c) 2003 WIPO/Univentio. All rts. reserv.
00473016
            **Image available**
A CAMERA WITH INTERNAL PRINTING SYSTEM
APPAREIL PHOTOGRAPHIQUE A SYSTEME D'IMPRESSION INTERNE
Patent Applicant/Assignee:
  SILVERBROOK RESEARCH PTY LIMITED,
  SILVERBROOK Kia,
  WALMSLEY Simon,
  LAPSTUN Paul,
Inventor(s):
  SILVERBROOK Kia,
  WALMSLEY Simon,
  LAPSTUN Paul,
Patent and Priority Information (Country, Number, Date):
                        WO 9904368 A1 19990128
  Patent:
  Application:
                        WO 98AU544 19980715
                                             (PCT/WO AU9800544)
  Priority Application: AU 978003 19970715; AU 978005 19970715; AU 978031
    19970715; AU 977991 19970715; AU 977998 19970715; AU 977988 19970715;
    AU 977993 19970715; AU 978012 19970715; AU 978017 19970715; AU 978014
    19970715; AU 978025 19970715; AU 978032 19970715; AU 977999 19970715;
    AU 978024 19970715; AU 978016 19970715; AU 978030 19970715; AU 977938
    19970715; AU 977997 19970715; AU 977979 19970715; AU 978015 19970715;
    AU 977978 19970715; AU 977982 19970715; AU 977989 19970715; AU 978019
    19970715; AU 977980 19970715; AU 977942 19970715; AU 978018 19970715;
    AU 978021 19970715; AU 978000 19970715; AU 977940 19970715; AU 977939
    19970715; AU 978020 19970715; AU 977985 19970715; AU 977987 19970715;
    AU 978022 19970715; AU 978029 19970715; AU 978023 19970715; AU 978028
    19970715; AU 978027 19970715; AU 978026 19970715; AU 977983 19970715;
    AU 977986 19970715; AU 977981 19970715; AU 977977 19970715; AU 977934
    19970715; AU 977990 19970715; AU 978497 19970811; AU 978505 19970811;
    AU 978498 19970811; AU 978504 19970811; AU 978501 19970811; AU 978500
    19970811; AU 978502 19970811; AU 978499 19970811; AU 979395 19970923;
    AU 979404 19970923; AU 979394 19970923; AU 979396 19970923; AU 979397
    19970923; AU 979398 19970923; AU 979399 19970923; AU 979400 19970923;
    AU 979401 19970923; AU 979402 19970923; AU 979403 19970923; AU 979405
    19970923; AU 97959 19971216; AU 981397 19980119; AU 982370 19980316; AU
    982371 19980316; AU 984094 19980612
Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES
  FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD
  MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US
  UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE
  CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN
  GW ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 191348
Fulltext Availability:
  Detailed Description
Detailed Description
     12,288 bits, or 1.5K13 exactly. Since the VLIW Vector Processor 74
  consists of 4 identical PUs e.g 178 this equates to 6,144 bytes,
  exactly 6K13. Some of...
```

(Item 1 from file: 348) 11/3, K/1DIALOG(R) File 348: EUROPEAN PATENTS (c) 2003 European Patent Office. All rts. reserv. 01397631 OPTICAL HEAD OPTISCHER KOPF TETE OPTIQUE PATENT ASSIGNEE: MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD., (216883), 1006, Oaza-Kadoma, Kadoma-shi, Osaka 571-8501, (JP), (Applicant designated States: all) INVENTOR: ARAI, Akihiro, 6-2-1-1-504, Kizugawadai, Kizucho, Soraku-gun, Kyoto 619-0225, (JP) HAYASHI, Takao, 2-11-47, Uenonishi, Toyonaka-shi Osaka 560-0011, (JP) NAKAMURA, Toru, 17-8, Fujigao 5-chome, Katano-shi Osaka 576-0022, (JP) NAGATA, Takayuki, 1-37-501, Nakamiyakitamachi, Hirakata-shixOsaka 573-1194, (JP) LEGAL REPRESENTATIVE: Grunecker, Kinkeldey, Stockmair & Schwanhausser Anwaltssozietat (100721) , Maximilianstrasse 58, 80538 Munchen, (DE) PATENT (CC, No, Kind, Date): EP 1310951 A1 030514 (Basic) WO 2002001554 020103 EP 2001941185 010622; WO 2001JP5366 010622 APPLICATION (CC, No, Date): PRIORITY (CC, No, Date): JP 2000190893 000626; JP 2000214050 000714 DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE; TR EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI INTERNATIONAL PATENT CLASS: G11B-007/09; G11B-007/095 ABSTRACT WORD COUNT: 148 NOTE: Figure number on first page: 0001 LANGUAGE (Publication, Procedural, Application): English; English; Japanese FULLTEXT AVAILABILITY: Word Count Update Available Text Language 2516 200320 CLAIMS A (English) 200320 21858 (English) SPEC A Total word count - document A 24374 Total word count - document B Total word count - documents A + B 24374 ...SPECIFICATION beam splitter 203, and are incident on the relay lens 206. If for example, the astigmatism method is used as a focus detecting

- ...SPECIFICATION beam splitter 203, and are incident on the relay lens 206. If for example, the **astigmatism** method is used as a **focus** detecting method, the relay lens 206 has refractive power equal to that of a **cylindrical lens** and thus sufficient to cause **astigmatism**, and guides the beams to the light receiving means 237. As shown in Figure 28
- ...the four-piece light receiving element 240 is received so as to be divided into **four parts** . A calculation is executed on the basis of the wire connection shown in the drawing...

11/3,K/2 (Item 2 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2003 European Patent Office. All rts. reserv.

00373472

Light detecting apparatus.

Lichtfeststellungsvorrichtung.

Appareil pour la detection de la lumiere.

PATENT ASSIGNEE:

KABUSHIKI KAISHA TOSHIBA, (213130), 72, Horikawa-cho Saiwai-ku, Kawasaki-shi Kanagawa-ken 210, (JP), (applicant designated states: DE;FR;NL)

INVENTOR:

Ando, Hideo Intellectual Property Division, Toshiba Corporation 1-1, Shibaura 1-chome, Minato-ku Tokyo 105, (JP)

LEGAL REPRESENTATIVE:

BATCHELLOR, KIRK & CO. (100991), 2 Pear Tree Court Farringdon Road, London EC1R ODS, (GB)

PATENT (CC, No, Kind, Date): EP 376708 A2 900704 (Basic)

EP 376708 A3 911023

APPLICATION (CC, No, Date): EP-89313629 891228;

PRIORITY (CC, No, Date): JP 88327582 881227; JP 88327583 881227; JP

88327584 881227; JP 88327580 881227

DESIGNATED STATES: DE; FR; NL

INTERNATIONAL PATENT CLASS: G11B-007/09;

ABSTRACT WORD COUNT: 62

LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY:

Available Text Language Update Word Count EPABF1 CLAIMS A (English) 680 SPEC A (English) EPABF1 7466 Total word count - document A 8146 Total word count - document B 0 Total word count - documents A + B 8146

- ...SPECIFICATION light from an optical disc is irradiated onto a photo detector, which is divided into **four** parts, with these **parts** combined in a square, via a **cylindrical lens** which generates **astigmatism**. This photo detector performs detection of focussing errors and generates **focus** error signals and reading information according to the area of light irradiated. In this detection...
- ...two focal lines which are formed in the direction of the generatrix generated by the **cylindrical lens** and the direction orthogonal to that generatrix. Detection of focusing errors signals and reading of...

11/3,K/3 (Item 3 from file: 348)

DIALOG(R) File 348: EUROPEAN PATENTS

(c) 2003 European Patent Office. All rts. reserv.

00366923

Optical head apparatus.

Anordnung fur einen optischen Kopf.

Dispositif de tete optique.

PATENT ASSIGNEE:

Oki Electric Industry Company, Limited, (225690), 7-12, Toranomon 1-chome Minato-ku, Tokyo 105, (JP), (applicant designated states: DE;FR;GB;NL) INVENTOR:

Tanoshima, Katsuhide Oki Electric Industry Co. Ltd, 7-12, Toranomon 1-chome, Minato-ku Tokyo, (JP)

Ohtsuka, Minoru Oki Electric Industry Co. Ltd, 7-12, Toranomon 1-chome, Minato-ku Tokyo, (JP)

Nagata, Shizuo Oki Electric Industry Co. Ltd, 7-12, Toranomon 1-chome, Minato-ku Tokyo, (JP)

Takahashi, Masahiro Oki Electric Industry Co. Ltd, 7-12, Toranomon 1-chome, Minato-ku Tokyo, (JP)

Shimizu, Yasuo Oki Electric Industry Co. Ltd, 7-12, Toranomon 1-chome, Minato-ku Tokyo, (JP)

LEGAL REPRESENTATIVE:

Read, Matthew Charles et al (47911), Venner Shipley & Co. 20 Little

Britain, London EC1A 7DH, (GB)

PATENT (CC, No, Kind, Date): EP 350225 A2 900110 (Basic)

EP 350225 A3 901219

EP 350225 B1 940126

APPLICATION (CC, No, Date): EP 89306700 890630;

PRIORITY (CC, No, Date): JP 88169400 880707

DESIGNATED STATES: DE; FR; GB; NL

INTERNATIONAL PATENT CLASS: G11B-007/08; G11B-007/085;

ABSTRACT WORD COUNT: 106

LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY:

| Available Tex | Language | Update | Word Count |
|----------------|---------------|-----------|------------|
| CLAIMS | 3 (English) | EPBBF1 | 864 |
| CLAIMS | 3 (German) | EPBBF1 | 804 |
| CLAIMS 1 | 3 (French) | EPBBF1 | 923 |
| SPEC B | (English) | EPBBF1 | 3845 |
| Total word con | ınt - documer | nt A | 0 |
| Total word con | ınt - documer | nt B | 6436 |
| Total word con | int - documer | nts A + B | 6436 |

...SPECIFICATION In addition, if a means for applying astigmatism to the light source, such as a **cylindrical lens** is disposed along the light path and the photodiodes 84 are divided into **four parts** (so-called astigmatic method), then a **focus** error signal can be generated.

Furthermore, the generator circuit 63 computes the difference between the...

```
File
       9:Business & Industry(R) Jul/1994-2003/Dec 29
         (c) 2003 Resp. DB Svcs.
File
      15:ABI/Inform(R) 1971-2004/Jan 03
         (c) 2004 ProQuest Info&Learning
File
      16:Gale Group PROMT(R) 1990-2004/Jan 05
         (c) 2004 The Gale Group
      20:Dialog Global Reporter 1997-2004/Jan 05
File
         (c) 2004 The Dialog Corp.
File
      47: Gale Group Magazine DB(TM) 1959-2004/Dec 26
         (c) 2004 The Gale group
File
      75:TGG Management Contents(R) 86-2004/Dec W4
         (c) 2004 The Gale Group
File
      80:TGG Aerospace/Def.Mkts(R) 1986-2004/Jan 05
         (c) 2004 The Gale Group
      88:Gale Group Business A.R.T.S. 1976-2004/Jan 05
File
         (c) 2004 The Gale Group
File
      98:General Sci Abs/Full-Text 1984-2003/Nov
         (c) 2003 The HW Wilson Co.
File 112:UBM Industry News 1998-2003/Dec 24
         (c) 2003 United Business Media
File 141: Readers Guide 1983-2003/Nov
         (c) 2003 The HW Wilson Co
File 148:Gale Group Trade & Industry DB 1976-2004/Jan 05
         (c) 2004 The Gale Group
File 160: Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
File 275: Gale Group Computer DB(TM) 1983-2004/Jan 05
         (c) 2004 The Gale Group
File 264: DIALOG Defense Newsletters 1989-2004/Jan 05
         (c) 2004 The Dialog Corp.
File 369: New Scientist 1994-2003/Dec W2
         (c) 2003 Reed Business Information Ltd.
File 370:Science 1996-1999/Jul W3
         (c) 1999 AAAS
File 484: Periodical Abs Plustext 1986-2003/Dec W3
         (c) 2003 ProQuest
File 553: Wilson Bus. Abs. FullText 1982-2003/Nov
         (c) 2003 The HW Wilson Co
File 570: Gale Group MARS(R) 1984-2004/Jan 05
         (c) 2004 The Gale Group
File 608:KR/T Bus.News. 1992-2004/Jan 05
         (c) 2004 Knight Ridder/Tribune Bus News
File 620:EIU: Viewswire 2003/Dec 31
         (c) 2003 Economist Intelligence Unit
File 613:PR Newswire 1999-2004/Jan 05
         (c) 2004 PR Newswire Association Inc
File 621: Gale Group New Prod. Annou. (R) 1985-2004/Jan 05
         (c) 2004 The Gale Group
File 623: Business Week 1985-2004/Jan 02
         (c) 2004 The McGraw-Hill Companies Inc
File 624:McGraw-Hill Publications 1985-2004/Jan 05
         (c) 2004 McGraw-Hill Co. Inc
File 634: San Jose Mercury Jun 1985-2003/Dec 31
         (c) 2004 San Jose Mercury News
File 635:Business Dateline(R) 1985-2004/Jan 03
         (c) 2004 ProQuest Info&Learning
File 636:Gale Group Newsletter DB(TM) 1987-2004/Jan 05
         (c) 2004 The Gale Group
File 647:CMP Computer Fulltext 1988-2004/Dec W4
         (c) 2004 CMP Media, LLC
File 696: DIALOG Telecom. Newsletters 1995-2004/Jan 04
```

```
(c) 2004 The Dialog Corp.
File 674:Computer News Fulltext 1989-2003/Dec W3
         (c) 2003 IDG Communications
File 810:Business Wire 1986-1999/Feb 28
         (c) 1999 Business Wire
File 813:PR Newswire 1987-1999/Apr 30
         (c) 1999 PR Newswire Association Inc
? ds
        Items
                Description
Set
                CYLINDRIC? (3N) (LENS OR LENSES)
          491
S1
                 (FOUR OR 4 OR QUADRANT?) (3N) (PARTS OR SECTIONS OR SECTORS -
S2
       158448
             OR PARTITIONS OR SEGMENT?)
S3
      4973602
                FOCUS
S4
        28826
                 (NINETY OR 90) () DEGREES
S5
         9604
                ASTIGMATISM
S6
            0
                S1(S)S2
S7
           82
                S1(S)S3:S5
S8
           55
                S1(S)S3
                S8(S)S4
S9
            3
            8
                S8(S)S5
S10
            8
S11
                S9 OR S10
S12
            6
                RD S11 (unique items)
```

12/3,K/1 (Item 1 from file: 47)

DIALOG(R) File 47: Gale Group Magazine DB(TM)

(c) 2004 The Gale group. All rts. reserv.

05208701 SUPPLIER NUMBER: 21032047 (USE FORMAT 7 OR 9 FOR FULL TEXT) Troubleshooting CD-player startup problems. (compact disc)

Goldwasser, Sam

Electronics Now, v69, n9, p25(4)

Sep, 1998

ISSN: 1067-9294 LANGUAGE: English RECORD TYPE: Fulltext; Abstract WORD COUNT: 3594 LINE COUNT: 00258

... as described in the next paragraph.

5. The optical path in the pickup includes a **cylindrical lens** or **astigmatism** that causes the laser-beam spot to be circular when it is correctly focused, but...

...not. When it is not correctly focused, the major axis of the ellipse is offset 90 degrees, depending upon whether the lens is too close or too far (e.g., major axis of -45 degrees for too close and +45 degrees for too far). Focus Error is equal to (A + D) - (B + C), which will be 0 when focus is correct since, with the circular spot, the outputs of all four quadrants will be...

12/3,K/2 (Item 2 from file: 47)

DIALOG(R) File 47: Gale Group Magazine DB(TM)

(c) 2004 The Gale group. All rts. reserv.

05129132 SUPPLIER NUMBER: 20521481 (USE FORMAT 7 OR 9 FOR FULL TEXT) CD information storage and playback. (compact disc)

Goldwasser, Sam

Electronics Now, v69, n5, p23(4)

May, 1998

ISSN: 1067-9294 LANGUAGE: English RECORD TYPE: Fulltext; Abstract

WORD COUNT: 3384 LINE COUNT: 00254

... instead, and it is reflected by the polarizing beam splitter toward the photodiode array.)

A cylindrical lens slightly alters the horizontal and vertical focal distances of the resulting spot on the photodiode beam from the disc's information layer is used for servo control of focus and tracking, and for data recovery. The actual implementation could use an astigmatic objective lens rather than a separate cylindrical lens to reduce cost, but the effect is the same. Since the objective lens is molded...

...might have been a treat!). It is even possible that in some cases, the natural astigmatism of the laser diode itself plays a part in this process.

In essence, the optical...

12/3,K/3 (Item 1 from file: 141)

DIALOG(R) File 141: Readers Guide

(c) 2003 The HW Wilson Co. All rts. reserv.

03809169 H.W. WILSON RECORD NUMBER: BRGA98059169 (USE FORMAT 7 FOR FULLTEXT)

Troubleshooting CD-player startup problems.

Goldwasser, Sam.

Electronics Now (Electron Now) v. 69 no9 (Sept. '98) p. 25-8 WORD COUNT: 3660

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

... as described in the next paragraph.

5. The optical path in the pickup includes a **cylindrical lens** or **astigmatism** that causes the laser-beam spot to be circular when it is correctly focused, but...

...not. When it is not correctly focused, the major axis of the ellipse is offset 90 degrees, depending upon whether the lens is too close or too far (e.g., major axis of -45 degrees for too close and +45 degrees for too far). Focus Error is equal to (A + D) - (B + C), which will be 0 when focus is correct since, with the circular spot, the outputs of all four quadrants will be...

12/3,K/4 (Item 2 from file: 141)

DIALOG(R)File 141:Readers Guide

(c) 2003 The HW Wilson Co. All rts. reserv.

03780696 H.W. WILSON RECORD NUMBER: BRGA98030696 (USE FORMAT 7 FOR FULLTEXT)

CD information storage and playback.

Goldwasser, Sam.

Electronics Now (Electron Now) v. 69 no5 (May '98) p. 23-6 WORD COUNT: 3381

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

... instead, and it is reflected by the polarizing beam splitter toward the photodiode array.)

A **cylindrical lens** slightly alters the horizontal and vertical focal distances of the resulting spot on the photodiode control of **focus** and tracking, and for data recovery. The actual implementation could use an astigmatic objective lens rather than a separate **cylindrical lens** to reduce cost, but the effect is the same. Since the objective lens is molded

...might have been a treat!). It is even possible that in some cases, the natural **astigmatism** of the laser diode itself plays a part in this process.

In essence, the optical...

12/3,K/5 (Item 1 from file: 148)

DIALOG(R) File 148: Gale Group Trade & Industry DB (c) 2004 The Gale Group. All rts. reserv.

05123702 SUPPLIER NUMBER: 10408035 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Answering the need for WORM and rewritable optical storage: the Pioneer
multifunction optical disk drive. (write once, read many times)

Ekberg, Kent F.; Millet, Richard; Simpson, Cris Optical Information Systems, v11, n1, p19(5)

Jan-Feb, 1991

ISSN: 0886-5809 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 2875 LINE COUNT: 00225

... beam pickup because there are no grooves to follow as there are in CCS systems.

Focus error is detected using an astigmatism method. One of the advantages of the SS format is that focussing is performed only...

...Because of this, there are none of the changes in diffraction patterns seen with CCS. Astigmatism is generated by a cylindrical lens in the return light path before the polarizing beam splitter. The focus error signal is generated by a quadrature photodetector.

The controller circuitry for the multifunction optical...

12/3,K/6 (Item 1 from file: 484)
DIALOG(R)File 484:Periodical Abs Plustext
(c) 2003 ProQuest. All rts. reserv.

03673457 (USE FORMAT 7 OR 9 FOR FULLTEXT)

The platform is the UI

Holtzman, Jeff
Electronics Now (GRAD), v69 n5, p10-11+, p.3

May 1998
ISSN: 1067-9294 JOURNAL CODE: GRAD

DOCUMENT TYPE: Commentary

LANGUAGE: English RECORD TYPE: Fulltext; Abstract

WORD COUNT: 1789

TEXT:

... instead, and it is reflected by the polarizing beam splitter toward the photodiode array.)

A cylindrical lens slightly alters the horizontal and vertical focal distances of the resulting spot on the photodiode...

...main return beam from the disc's information layer is used for servo control of **focus** and tracking, and for data recovery. The actual implementation could use an astigmatic objective lens rather than a separate **cylindrical lens** to reduce cost, but the effect is the same. Since the objective lens is molded...

...might have been a treat!). It is even possible that in some cases, the natural astigmatism of the laser diode itself plays a part in this process.

In essence, the optical...